IV. Observations upon Osteomyelitis Non-purulentia (Sero-Mucinosa). By Dr. F. Grimm (Berlin). During a service of five years in a Japanese hospital at Yezo, the author observed twenty-two cases of osteomyelitis acuta. Besides these, one case of pronounced periositis albuminosa or osteomyelitis non-purulentia (Schlanger) was encountered.

A twelve-year-old boy developed the symptoms of osteomyelitis of the left femur after a traumatism. After using the limb for a short time, it became worse, and after several weeks he was brought to the hospital.

On opening a large, deep abscess of the left thigh, a clear, yellowish-green, tenacious fluid escaped,—about 600 cubic centimetres. A stump of the diaphysis of the femur, about the length of a thumb, projected into the cavity. It was partially covered with fresh granulations, as was the wall of the abscess. The evacuated fluid contained but few corpuscular elements, and culture experiments upon artificial media were negative.

The diseased leg was five centimetres shortened. A firm involucrum formed-and the sequestrectomy was performed in the usual manner.

Not all of the cases reported as periostitis albuminosa belong to the class of osteomyelitic diseases. It is best to classify the cases of this unusual termination of inflammations in sero-mucinous abscesses according to their origin. They may occur in tuberculous abscesses or in gummatous processes. Collections of sero-mucinous fluid occur under favorable circumstances upon granulating surfaces, as under dry scabs, etc. So it is not surprising that this condition is found sometimes in cavities which are lined with granulations. The lymph serum is alone absorbed, but mucin, which is composed of degenerated tissue, continues to collect, as it is absorbed with great difficulty. In a pure lymphadenoma cysticum originating from the sacrum and forming a prominent tumor over the trochanter, lymph serum and mucin together were found. A case reported by Ollier yielded a thick, slimy fluid at the first puncture, and later a thin serous fluid

was evacuated.—Verhandlungen der deutschen Gesellschaft für Chirurgie, XXIII Kongress, 1894.

V. Experimental Studies in the Transplantation of the Intermediary Cartilage. By Dr. Helferich (Greifswald). The observer has demonstrated by a variety of preparations that the transplantation or replantation of the intermediary cartilage from the ulna of the rabbit is possible without destroying the longitudinal growth of the bone. The microscopic examination also corroborates the conclusion.

In a large number of experiments (131 in all), a pronounced curving of the leg operated upon was observed to take place. This is the result of a broad union of the ulna at its seat of operation with the radius,—in fact, a union of the epiphysis of the ulna with the diaphysis of the radius.

It was especially observed that there was often a compensating lengthening of the epiphysis, probably as a result of the apposition on the sides of the joint cartilages.—Verhandlungen der deutschen Gesellschaft für Chirurgie, XXIII Kongress, 1894.

JAMES P. WARBASSE (Brooklyn).

VI. Extension Apparatus for the Application of Plaster Bandages to the Lower Extremities and to the Pelvis. By Dr. P. Bruns (Tübingen). The extension apparatus used for this purpose at the surgical clinic at Tübingen was first devised and described by V. Bruns some years ago. The original device has been modified and improved upon by the present professor of surgery there, P. Bruns, and is described by him as follows:

As can be seen from the illustration the apparatus consists essentially of two parts: a pelvic support which supplies counter-extension by pressure upon the perineum, and a movable rake-like attachment to which leather straps encircling the ankles are attached, thus securing extension of both legs. The sides and back of the buttocks, and the entire surface of the lower extremities are thus left free on all sides, and the bandage can be most conveniently applied. Extension